[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 20902 4/26/2001]

[Docket No. 2000-CE-31-AD; Amendment 39-12187; AD 2001-08-10]

RIN 2120-AA64

Airworthiness Directives; Aerostar Aircraft Corporation Models PA-60-600 (Aerostar 600), PA-60-601 (Aerostar 601), PA-60-601P (Aerostar 601P), PA-60-602P (Aerostar 602P), and PA-60-700P (Aerostar 700P) Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that applies to certain Aerostar Aircraft Corporation (Aerostar) Models PA-60-600, PA-60-601, PA-60-601P, PA-60-602P, and PA-60-700P airplanes. This AD requires you to replace both of the existing main landing gear lower side brace assemblies with parts of improved design. This AD is the result of several reports of cracking of the main landing gear lower side brace at the upper bolt lug discovered on preflight inspection. The actions specified by this AD are intended to correct damage or cracks in the main landing gear lower side brace at the upper bolt lug where the upper and lower side braces connect. This could result in failure of the main landing gear lower side brace. Such failure could lead to loss of control of the airplane.

DATES: This AD becomes effective on June 12, 2001.

The Director of the Federal Register approved the incorporation by reference of certain publications listed in the regulations as of June 12, 2001.

ADDRESSES: You may get the service information referenced in this AD from Aerostar Aircraft Corporation, 10555 Airport Drive, Hayden Lake, ID 83835; telephone: (208) 762-0338; facsimile: (208) 762-8349. You may read this information at the Federal Aviation Administration (FAA), Central Region, Office of the Regional Counsel, Attention: Rules Docket No. 2000-CE-31-AD, 901 Locust, Room 506, Kansas City, Missouri 64106; or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.

FOR FURTHER INFORMATION CONTACT: Richard Simonson, Aerospace Engineer, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW, Renton, Washington 98055; telephone: (425) 227-2597; facsimile: (425) 227-1181.

SUPPLEMENTARY INFORMATION:

Discussion

The FAA has received several reports of cracking of the main landing gear lower side brace at the upper bolt lug discovered on preflight inspection of Aerostar PA-60 Model airplanes. Damage or cracking of the main landing gear lower side brace, if not detected and corrected, could result in failure of this part. Such failure could lead to loss of the main landing gear with consequent loss of control of the airplane.

Aerostar has issued Service Bulletin SB600-134A, dated March 31, 2000. The service bulletin includes procedures for replacing both existing main landing gear lower side brace assemblies with parts of improved design, Aerostar part number 400084-001, lower side brace assemblies.

Has FAA taken any action to this point? We issued a proposal to amend part 39 of the Federal Aviation Regulations (14 CFR part 39) to include an AD that would apply to all Aerostar Models PA-60-600, PA-60-601, PA-60-601P, PA-60-602P, and PA-60-700P airplanes. This proposal was published in the *Federal Register* as a notice of proposed rulemaking (NPRM) on November 24, 2000 (65 FR 70535). The NPRM proposed to require you to replace both of the existing main landing gear lower side brace assemblies with parts of improved design

What is the potential impact if FAA took no action? Damage or cracks in the main landing gear lower side brace at the upper bolt lug where the upper and lower side braces connect could result in failure of the main landing gear lower side brace. Such failure could lead to loss of control of the airplane.

Was the public invited to comment? The FAA encouraged interested persons to participate in the making of this amendment. The following presents the comments received on the proposal and FAA's response to these comments:

Comment Issue: Why Not Withdraw the NPRM or Revise the AD to Require Only Repetitive Inspections?

What is the commenter's concern? Ten commenters state that their inspections have not shown any evidence of the problem described in the NPRM. They note that requiring replacement of these side braces with new parts imposes an undue financial burden on the airplane owners. Lastly, the commenters write that the repetitive inspections provide a sufficient level of safety for this airplane.

What is FAA's response to the concern? The FAA disagrees. There have been four reported cases, so far, of cracking in the upper bolt lug of this brace. More sophisticated analysis techniques than those available at the time of the initial airplane design show that the original braces do not meet the requirements of the Federal Aviation Regulations (14 CFR). As a result, the part was redesigned.

Fatigue cracks are extremely hard to detect early to avoid failure of the main landing gear lower side brace. The failure of a brace is hazardous. At the very least, the failure will result in severe damage to the airplane, with the possibility of follow-on damage to the airplane, and death or injury to the flight crew, passengers, and bystanders. For the above reasons, the original side braces must be replaced.

We are not changing the AD based on these comments.

FAA's Determination

What is FAA's Final Determination on this Issue? We carefully reviewed all available information related to the subject presented above and determined that air safety and the public interest require the adoption of the rule as proposed except for minor editorial corrections. We determined that these minor corrections:

- will not change the meaning of the AD; and
- will not add any additional burden on the public than was already proposed.

Cost Impact

How many airplanes does this AD impact? We estimate that this AD affects 650 airplanes in the U.S. registry.

What is the cost impact of this AD on owners/operators of the affected airplanes? We estimate the following costs to accomplish the modification:

| Labor Cost | Parts Cost | Total Cost Per Airplane | Total Cost on U.S. Operators |
|---|----------------------------|--|---------------------------------|
| 20 workhours X \$60 per hour = \$1,200. | \$1,682 for each airplane. | \$1,200 + \$1,682 = \$2,882 for each airplane. | \$2,882 X 650 = \$1,873,300. |

Regulatory Impact

Does this AD impact various entities? The regulations adopted will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government. We have determined that this rule would not have federalism implications under Executive Order 13132.

Does this AD involve a significant rule or regulatory action? For the reasons discussed above, I certify that this action (1) is not a "significant regulatory action" under Executive Order 12866; (2) is not a "significant rule" under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979); and (3) will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act. A copy of the final evaluation prepared for this action is contained in the Rules Docket. You may get a copy of it from the Rules Docket at the location provided under the caption "ADDRESSES".

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows: PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. FAA amends § 39.13 by adding a new AD to read as follows:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service Washington, DC

U.S. Department of Transportation Federal Aviation Administration

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2001-08-10 AEROSTAR AIRCRAFT CORPORATION: Amendment 39-12187; Docket No. 2000-CE-31-AD.

- (a) What airplanes are affected by this AD? This AD affects the following airplane models, serial numbers 1 through 1026 that are certificated in any category: Models PA-60-600 (Aerostar 600), PA-60-601 (Aerostar 601), PA-60-601P (Aerostar 601P), PA-60-602P (Aerostar 602P), and PA-60-700P (Aerostar 700P).
- (b) Who must comply with this AD? Anyone who wishes to operate any of the above airplanes must comply with this AD.
- (c) What problem does this AD address? The actions specified by this AD are intended to correct damage or cracks in the main landing gear lower side brace at the upper bolt lug where the upper and lower side braces connect. This could result in cracking and failure of the main landing gear lower side brace. Such failure could lead to loss of control of the airplane.
- (d) What actions must I accomplish to address this problem? To address this problem, you must do the following:

| Actions | Compliance | Procedures |
|--|--|--|
| (1) Replace both main landing gear lower side brace assemblies with Aerostar part number 400084-001 lower side brace assemblies. | Within the next 50 hours time- in-service after June 12, 2001, unless already performed. | Do these replacements following the INSTRUCTIONS PART II: Replacement paragraph of Aerostar Service Bulletin SB600- 134A, dated March 31, 2000, and the Aerostar Maintenance Manual. |
| (2) Do not install, on any affected airplane, main landing gear lower side brace assemblies that are not Aerostar part number 400084-001 or FAA-approved equivalent part number. | As of June 12, 2001. | Not applicable. |

- (e) <u>Can I comply with this AD in any other way?</u> You may use an alternative method of compliance or adjust the compliance time if:
 - (1) Your alternative method of compliance provides an equivalent level of safety; and
- (2) The Manager, Seattle Aircraft Certification Office (ACO), approves your alternative. Send your request through an FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO, 1601 Lind Avenue, SW, Renton, Washington 98055.

Note: This AD applies to each airplane identified in paragraph (a) of this AD, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance following paragraph (e) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if you have not eliminated the unsafe condition, specific actions you propose to address it.

- (f) Where can I get information about any already-approved alternative methods of compliance? Contact Richard Simonson, Aerospace Engineer, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW, Renton, Washington 98055; telephone: (425) 227-2597; facsimile: (425) 227-1181.
- (g) What if I need to fly the airplane to another location to comply with this AD? The FAA can issue a special flight permit under sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate your airplane to a location where you can accomplish the requirements of this AD.
- (h) Are any service bulletins incorporated into this AD by reference? Actions required by this AD must be done following Aerostar Aircraft Corporation Service Bulletin SB600-134A, dated March 31, 2000. The Director of the Federal Register approved this incorporation by reference under 5 U.S.C. 552(a) and 1 CFR part 51. You can get copies from Aerostar Aircraft Corporation, 10555 Airport Drive, Coeur d'Alene Airport, Hayden Lake, Idaho 83835-8742. You can look at copies at the FAA, Central Region, Office of the Regional Counsel, 901 Locust, Room 506, Kansas City, Missouri, or at the Office of the Federal Register, 800 North Capitol Street, NW, suite 700, Washington, DC.
- (i) When does this amendment become effective? This amendment becomes effective on June 12, 2001.

FOR FURTHER INFORMATION CONTACT: Richard Simonson, Aerospace Engineer, FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW, Renton, Washington 98055; telephone: (425) 227-2597; facsimile: (425) 227-1181.

Issued in Kansas City, Missouri, on April 13, 2001.

David R. Showers, Acting Manager, Small Airplane Directorate, Aircraft Certification Service.